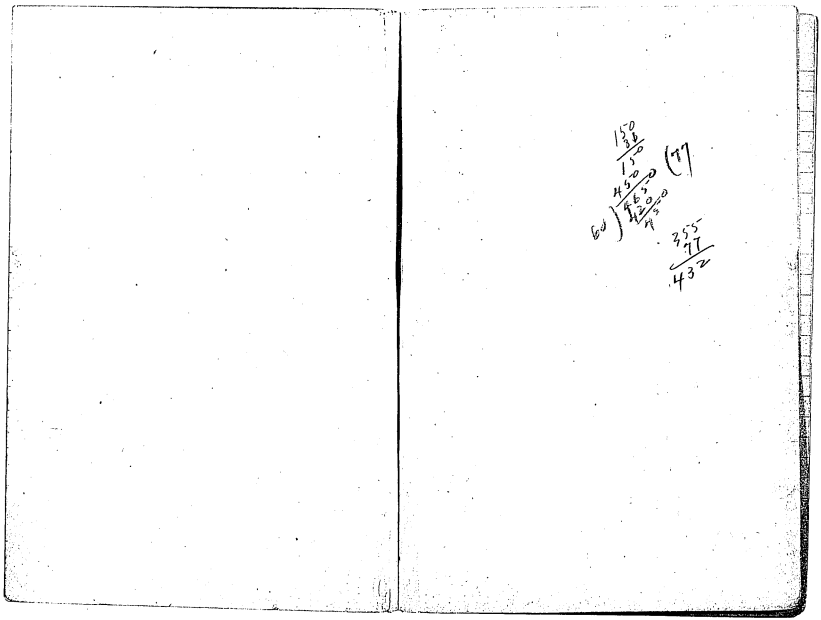
Notebook, N-01-04-05



April 5th 1901

No 320 Reg-grids. Latest, first drudg

Millions	Closed	Open		
426	274	115		3rd pag
432	250	107	128	
440	130	55	88	
445	122	51	86	
450	114	48	82	
455	108	47	80	
500	100	42	76	First Run
505	95	39	75	
510	89	37	75	
516	74	31	74	
520	66	27	73	
525	51	21	70	
530	33	13		

Not rolled

grids not plated

No. 320. Second Run

Time	Milliamps	Volts.	V. Open
7.45	308	129	154
7.50	280	119	137
7.55	268	114	130
8.01	258	109	126
8.05	250	106	122
8.11	168	68	110
8.16	115	48	86
8.20	107	45	76
8.26	100	41	70
8.30	96	39	68
8.35	90	37	64
8.40	85	35	60
8.45	80	33	58
8.50	73	31	55
8.55	70	29	54
9.00	65	27	53
9.05	58	24	52
9.10	52	22	50
9.15	45	19	— off

No 320. Third Run.

Line	Ill. Amp.	Volts	V. Ohms
1.56	295	126	149
200	275	119	135
205	260	112	127
211	228	98	108
215	218	94	106
220	203	88	104
224	123	52	100
228	105	45	75
235	94	40	70
240	88	38	65
245	85	36	60
253	89	33	55
300	73	31	54
307	68	29	53
315	62	26	50
320	58	24	45
325	53	22	40
330	48	20	35
335	41	18	

3rd Run

No 320 Fourth Run

Time	M Amps	D. Ohms	W Ohms
8.13	312	130	154
8.17	287	119	137
8.22	268	114	128
8.30	253	109	126
8.35	241	103	123
8.42	130	58	98
8.48	113	48	90
8.55	103	43	82
9.10	85	36	65
9.15	80	34	63
9.20	75	32	60
9.25	70	30	58
9.31	66	28	59
9.39	57	24	48
9.45	53	22	45
9.52	46	19	45
9.58	40	16	

3rd

off

310	303	138	158
317	270	115	132
326	228	98	112
331	214	96	106
352	98	38	70

4th Run

off

9.10	300	125	138
9.15	284	118	132
9.25	269	113	127
9.30	258	109	125
9.35	195	81	122
9.40	140	59	100
9.45	126	53	86
9.53	103	43	75
10.00	92	38	65
10.06	86	36	64
10.14	76	32	60
10.24	62	26	55
10.34	49	20	48
10.45	30	12	

5th Run

off

No 320. Sixth Run

Time	Milamps	Volts	V Open
8.08	300	105	152
8.13	273	117	132
822	256	110	126
827	242	105	122
834	138	59	102
838	117	49	90
845	102	43	75
850	96	41	70

Cut Out

No. 321 Empty 5.1
Full 11.8 net

Fe_2O_3 reduced in H at 500° + kept in H for 16 hrs. fine + black 8 parts

Plumbago 2 parts.
Moistened KOH. 100 atm.
Reg. Grid.

Time	M.amp.	Volts	Ω per cm.	
9.05	2.80	120	150	1st Run
9.10	2.55	110	133	
9.15	2.41	107	129	43 Mich.
9.20	2.40	103	125	
9.26	2.26	97	123	86 "
9.31	1.12	47	90	96
9.34	2.15	110	138	New Mi 114
9.40	2.10	90	132	
9.45	2.04	89	127	
9.50	2.05	84	122	151 "
9.55	2.02	87	120	
10.00	1.98	85	118	185
10.05	1.10	46	90	
10.15	99	41	75	
10.15	93	39	70	208 "
10.17	2.75	114	142	New Mi.
10.20	2.50	107	127	
10.30	2.25	95	114	
10.35	2.08	88	108	240 "
10.40	1.98	84	103	
10.46	1.95	78	98	
10.53	93	39	75	
10.54	2.60	108	134	New Mi. 292
11.00	2.09	88	109	
11.05	2.00	84	104	
11.11	1.91	81	100	352
11.17	1.78	75	93	
11.23	1.63	70	90	
11.30	1.44	61	85	395
11.37	1.28	54	82	
11.43	75	32		421

Next Page

No. 321 Continued

Time	Amp	Volts	V. Capm	
1150	240	100	122	New Mi
1200	103	43	55	
1205	96	40	50	
1210	90	38	78	
1215	83	35	73	474 Mah.
1223	79	33	73	484 "
				off
106	263	110	130	
112	227	96	112	
120	108	45	86	
127	80	33		524.
130	75	32		70. 539
134	320	94	131	New Mi.
142	168	71	95	
148	140	59	80	
154	104	104	70	592
200	85	36	65	
204	79	33		70. 615 Matt.
205	180	66	100	New Mi.
213	76	30	75	632 Matt.
219	66	27		
225	61	24		654
231	56	24		
239	55	23		70 665
245	52	22		New Mi.
251	50	21		
253	180	60	102	
259	51	22		
306	48	20		
312	45	19		686
318	45	17		734 Matt.
324	44	15		off

Taken two more
on Lumbo

No. 322. Empty 5.45 $\frac{107}{1000}$
Full 12.75

Fe Oxide from finely divided iron
by CO_2 at white heat.
Strongly magnetic 8 Parts
Plumbago 2 "
Mount KOH 50%
100 Atm. 107/1000

Time	Mi. Amp.	Volts	V. Open

Coached
Cut Cut

Brick 4.95

No. 323 Empty 5.35 106/1000

Filled 10.3

Magnesia chlorinated with drying chlorine washed on filter upstream

powdering 6 pulls

Plumbago 4 "

Moist KOH

Cathe 50 atm. Cup 50 atm

Time	Milliamps	Volts	K Oxygen
516	2.80	119	102
823	210	80	107
829	195	82	102
834	190	80	100
840	184	78	97
847	178	75	94
853	170	72	93
859	200	83	102
905	170	72	92
914	146	62	86
920	139	56	84
926	119	51	82
934	103	44	84
940	96	41	78
946	90	38	
952	83	35	
958	77	33	
1004	72	31	
1016	65	28	
1032	61	26	
1038	60	25	
1034	56	24	
1047	43	18	

1st Run with No. 321 re.

3rd Peg

52 Matt.

121 "

177 "

223 "

268 "

~~291~~ Matt.

Calipers 133

10.30
5.35
4.95

323

Time	MAmp	Volts	V.O	pem	Mark
4 01	28 0	1.51	1.52		
407	240	103	126		
413	226	95	118	48	
420	210	89	110	85	
428	199	83	104		
435	193	81	101		
441	191	81	100	154	
450	188	79	98		
455	186	78	96	197	
501	182	77	95		
507	179	76	94		
515	173	73	91		
521	169	71	89		
539	150	64	81	322	
547	140	60	76		
555	130	55	72		
603	130	51	66	376	
645	92	40	56		
621	81	37	54		
636	79	33			
647	231	100	126		
659	202	85	113		
639	175	75	95		
718	226	95	125		
729	168	71	96		
735	96	40			
745	93	39			
800	77	33			
810	65	27			
825	35	9			

2nd Run Fe 322
3rd Pay

412 Hemo Fe 321

445 Mark

520

571 Mark

No 323

Time	MAmp	Volts	V.O	pem	Mark
9 08	273	1.60	1.34		
920	205	86	1.04		
930	191	79	97		
945	162	67	86		
1000	139	58	76	162	
1015	127	53	70		
1033	105	43			
1043	99	40		241	
1049	262	105	138		
1059	232	97	121	302	
1114	226	94	120		
1130	216	90	118	419	
1145	126	52	85		
1200	115	48	75	491	
1215	100	41			
1245	105	41			
1200	500	19		538	
830	290	120	141		
847	253	108	138		
900	252	104	136		
915	245	103	124	194	
930	239	101	122		
945	233	98	119		
1000	229	96	118		
1015	220	99	116	425	
1030	156	69	95	475	
1045	121	51			
1103	106	44		549	
1118	69	27			
800	275	1.141	1.50		
815	237	101	126		
830	229	97	122		
845	223	95	120	181	
900	224	95	118		
915	220	93	116		
930	216	91	114	345	
945	214	90	113	401	
1000	207	87	108	454	
1015	191	80	102	508	
1030	182	76	98	548	
1045	138	58			
1100	93	39			
1115	84	36		637	

3rd Run
No 321 Fe
3rd Pay

No 329

4th Run
Hemo Fe 338
3rd Pay

5th Run
Hemo Fe 331
3rd Pay

Part the month

No 323 6th Run 2nd Peg. Double Fe 338

Time	Amp	Volts	VOpen	MAN	
800	150	131	157		
820	134	119	134		
830	122	110	136		
905	119	104	116	143	
925	113	99	110		
940	113	95	106		
1000	108	94	104	245	
1020	105	93	104		
1040	102	92	102		
1110	101	89	102	368	
1130	100	86	102		
1145	99	86	102	426	off
1240	125	109	116		on
100	119	103	120	468	
120	114	100	118		
140	109	95	114	544	
155	102	89		569	
210	99	85		594	
225	78	67		612	
240	66	53			
300	59	51			
315	53	46			
335	38	32			
400	10	8			off
					06
815	345	85	136		7th Run
830	308	76	128		4th Peg
850	289	72	122		
910	259	65	112		
940	238	58	102	397	
1000	220	54	98		
1020	217	29		529	
1050	96	24			
1120	20	5			on

323 8th Run 2nd Peg
Double Fe 338

Time	Amp	Volts	VOpen	MAN	
745	112	100	142		
805	100	88	135		
10	106	94	131		
925	105	93	129		
940	104	92	129	95	
955	103	92	128		
1013	101	89	124		
1030	93	82	112	179	
1045	91	80	104	202	
1105	91	79	108	232	
1125	89	78	107	262	
1143	89	77		288	
1215	89	77		329	
130	88	75		440	
240	68	58		531	off

No 323. 9th Run 2nd Peg.

Time	Amps	Volts	Open	MAH.
8.15	142	116	145	
8.35	140	114	128	
8.50	138	113	128	85
9.10	138	112	127	
9.25	138	111	126	
9.40	136	111	126	200
9.55	135	110	126	234
10.10	135	110	125	268
10.25	133	109	125	301
10.40	133	108	124	335
11.00	132	107	124	379
11.15	129	106	122	412
11.30	128	104	121	443
11.45	99	71	85	471
12.00	98	62		492
12.15	71	60		510
12.30	70	57		528
12.45	60	49		544
1.00	40	32		559
10				

3rd peg

No, 324. Empty 5.35 107/1000

Filled 10.25

Magnesia sauce as 323. 6 parts Plumbago 4 11

Mount KOH.

Cathe 100 Atm. Cap 5-0 Atm.

Time.	MA Amp.	Volts.	V. Open.
1054	290	120	150
1102	250	107	127
1108	245	104	125
1114	240	103	123
1120	236	101	120
1126	231	99	118
1132	226	97	116
1145	210	89	108
1151	202	86	106
1157	190	80	99
1203	185	78	97
1209	181	77	95
1215	178	75	94
1221	161	69	92
1227	90	38	
1233	88	37	
1239	85	36	
1245	82	35	
1251	78	33	
105	65	28	
106	53	23	
112	43	18	

1st Run No 322 70

132 MAH.

222

297

352

379 MAH.

Calipers 139

324 – 2nd Run (322 from plating)

755	1282	118	139	Mathew
820	224	95	113	105
830	205	87	103	140
845	200	84	100	190
9–	190	80	95	238
930	163	70	84	282
930	240	115	126	
950	125	62	80	343
1005	99	41		
1010	94	40		
944	302	113	136	
922	270	105	128	
932	246	95	116	
942	216	83	100	
1001	208	78	97	159
1006	200	77	95	
1033	136	52	64	
1018	130	50	62	
1100	105	40	49	370
1135	109	42	60	
1131	83	31		435
1146	73	28		
1147	248	96	122	
1201	141	54	70	492
1215	125	47		
1215	137	48		
1200	89	33		575
1207	80			

now Fe 321

off

3rd Run 10322 Fe

3rd Pay

Range 10329

off

324 4th Run Double Fe 340

Time	Amp.	Volts	V Open	MAH
831	305	114	138	
848	264	102	125	
901	240	191	123	
916	257	99	122	207
931	250	97	121	
946	242	94	119	
1001	239	92	118	
1016	231	89	115	450
1031	133	51		495
1046	141	47		
1109	90	34		550
1119	15			
801	310	115	132	
816	256	99	123	
831	257	98	121	
846	249	96	119	196
901	241	93	118	
916	241	93	114	
931	235	91	114	379
946	232	89	112	435
1001	200	76	106	493
1016	114	43		
1031	98	37		538
1046	78	29		546
1101	50	19		
801	160	130	150	
821	140	113	129	
851	133	109	124	
906	133	108	122	151
926	131	105	118	
941	129	104	114	
1001	123	99	114	270
1021	117	95	104	
1051	114	92	103	
1111	112	90	102	405
1131	111	89	100	
1146	109	88	100	470
1201	139	105	124	
101	73	59		504
121	62	50		

4th Run

3rd Pay

5th Run Double Fe 339

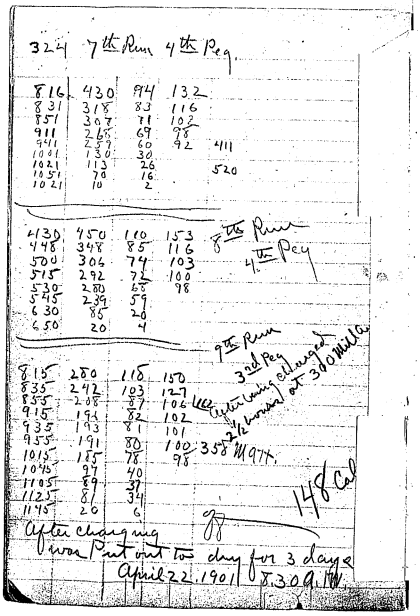
3rd Pay

off

6th Run Double Fe 341

2nd Pay

off



324 7th Run 4th Reg.

816	430	94	132	
831	318	83	116	
851	307	71	102	
911	265	69	98	
941	259	60	92	411
1041	130	30		
1021	113	26		
1051	70	16		520
1021	10	2		

8th Run
4th Reg.

4130	450	110	153
448	398	85	116
500	306	74	103
515	292	72	100
530	280	68	98
545	239	59	
630	85	20	
650	20	4	

7th Run
3rd Reg
Cartridges changed at 300 Mills
Ammunition changed at 350 Mills

815	280	118	150	
835	242	103	127	
855	208	87	106	
915	193	82	102	
935	193	81	101	
955	191	80	100	358 M9th.
1015	185	78	98	
1045	97	40		
1105	89	37		
1125	81	34		
1145	20	6		

148 Cal

After changing Gun Put out to dry for 3 days
April 22 1901 T.309 M9th

324 1st Run 3rd Reg

832	318	122	157	
851	255	101	127	
911	243	95	122	122
941	230	90	118	193
1024	219	85	114	253
1054	201	79	107	313
1109	178	70	91	370
1126	107	41		410
1152	75	28		430

Was Cleaning Gun Put out to dry for 3 days after shooting 1st Run

2nd Run
3rd Reg

810	313	118	152	
820	273	103	130	
834	258	96	129	111
846	251	95	122	162
902	245	93	120	225
922	235	89	117	308
932	224	87	115	346
950	210	81	109	432
1000	145	55		462
1035	93	35		531
1053	72	23		555

off

324 125 Rm. Constant Current

Time	Amp.	Volts	VO	Rem.	Matt
858	150	135	154		
914	150	120	132		
929	150	117	129		
951	150	103	115		
1010	150	95	107		
1038	150	97	110		
1100	150	94	107		
1124	150	92	105		
1145	150	91	104		
1148	150	89	104	425	
1235	150	109	125		
102	150	45		487.5	
115	150	35			

339 Fe

3rd peg

No. 325 Empty 5.35 107/1000
Filled 10.25
Magnesia same as 323 6 parts
P. lumbr. 4 "
Moist KOH.
Cake 100 Alum. Cup. 100 Alum.

Time.	Hh.	Amp.	Volts.	V. Open.	
1					
115		235	104	116	
124		187	76	98	
130		168	70	84	
136		160	67	80	
142		150	64	76	
148		145	61	73	
155		137	58	69	
201		130	54	66	
207		114	48	60	
213		92	38	48	
219		80	34	44	
225		67	28		
248		230	96	114	
330		20			

1st Hour 322 Fe
110 Matt.
156 "
New 7c.
165 Matt.
Calipers 127

325 2nd Run — 321 Fe

1012	225	96	110		Think Fe weak
1030	200	84	98	63	
1050	183	77			
1103	162	64		164	
1110	250	107	126		new good Fe 322
1125	220	93	112	222	
1140	192	82		272	
1205	180	76		359	83 Vom 2nd pr
1220	170	71		430	
1235	139	59		488	
1245	71	30		475	= 66
110					

918	305	114	147		3rd Run
923	280	106	132		No 321 Fe
928	269	102	127		
948	268	98	124		
1003	248	93	120	199	
1018	230	87	112		152 Calpine
1036	209	77	100	317	
1051	156	73	96		
1106	156	69	93	415	
1121	173	65	85		
1132	153	60	85	490	
1152	88	35	55		
1212	89	33			
1225	129	48	80	545	New Fe No 321
1238	49	18			
1246	80	26			
1261	19			566	

325 4th Run — Double Fe 341

Time	Amp.	Volts	%Open	MAN	
732	312	116	138		4th Run
549	278	103	124		
902	268	102	121		
917	262	100	122	207	
932	257	96	120		
947	250	95	119		
1002	249	92	117		
1017	230	87	114	456	
1032	193	57		501	
1047	119	45			
1105	56	21		559	
					5th Run Double Fe 340
802	305	113	149		
817	257	98	127		
832	245	93	117		
847	237	90	113	192	
902	232	85	110		
917	225	83	107		
932	220	83	105	369	
947	219	79	102	418	
1002	202	76	100	469	
1017	152	56	85		
1033	110	40		546	
1047	98	37			
1112	76	28		644	
					6th Run Double Fe 344 2nd Pair
802	156	125	147		
822	143	116	131		
852	139	111	126		
907	137	109	123	154	
927	133	107	120		
941	131	104	117	276	
1002	126	102	114		
1032	122	97	110		
1052	118	94	107		
1112	114	92	115	417	
1132	114	91	104	483	
1147	112	90	102		
1242	140	111	125		
102	111	88	102	525	
122	63	50			
1421	59	47			

325 7th Run. 4th Peg

817	4450	100	138
832	400	90	128
852	375	86	126
912	363	81	122
942	268	46	95
1002	160	36	479
1022	55	12	
1052	15		576

843	280	118	138	8th Run
853	250	106	125	3rd Peg
911	242	102	122	118
921	239	100	120	158
943	228	97	118	294
956	220	94	116	298
1010	212	89	111	348
1032	190	84	104	421
1052	122	51		
1102	104	43		
1128	95	40		
1135	82	36		
1203	43	18		
1257	90	38	121	
130	13	5		

Put out to dry for 3 days after drying.
Apr 2/2 1901
180 P.M.

325 7th Run 3rd Peg

Time	Amps	Volts	Watts	MAH.	
100	286	120	151		Was [illegible]
2	13	134	127		air [illegible]
135	235	101	124		[illegible]
715	233	98	121	185	[illegible]
800	226	95	118	242	[illegible]
815	214	90	115	297	[illegible]
830	205	86	109	350	
845	197	83	106	403	
900	167	70	100	448	
920	100	42	60	492	
930	98	40		509	
945	84	35		532	

May 3. 1901 Gave 32.5 to Ralph To make tests with

3rd pay

No 326 Empty 5.35 99/1000
Filled 10.1
Magazine no 323 6 points
Plumbago 4 "
Mount NOH.
Cathode 50 Alum. Cup. 100 Alum.

Time.	Ch. Amp.	Volts.	V. Open.	
1.12	230	104	141	1st Run
1.28	218	98	112	
1.34	209	96	103	No 321 Te
1.40	205	94	102	
1.46	201	93	101	104 Math
1.52	200	92	99	
1.58	197	90	98	
2.04	192	79	96	3rd Pay
2.14	181	74	92	175
2.20	181	67	86	
2.28	141	58	78	
2.40	110	45	70	248
2.46	100	42	68	
2.53	92	37	65	
2.59	86	36		
3.05	80	33		
3.11	75	31		
3.18	70	29		
3.24	69	28		
3.30	66	27		
3.36	62	26		316 Math.
3.43	60	24		
3.49	55	23		332 Math.
3.55	51	22		
4.01	47	20		80
				Cathepsin 135

326 2nd Run —

7EN0322 300mah out of st when put on to be sure fully charged had lasted st 6h 2mins before any goes on st.

1250	183	78	92		
110	139	59	71		
119	120	52	65	100	
135	72	31	42	126	
140	68	28	40		
146	60	26	36	138	
148	58	25		149	
149	250	104	126		
	199	85	105	185	
	195	83	102		
	194	82	101		
	190	80	99	253	
245	188	79	98		
200	172	73	92		
253	136	58	76		
258	120	51	71		
260	83	35	58		
323	70	29	55	348	
329	58	24			
336	52	22			
341	46	20			
354	41	17		389	MAH

3rd Reg

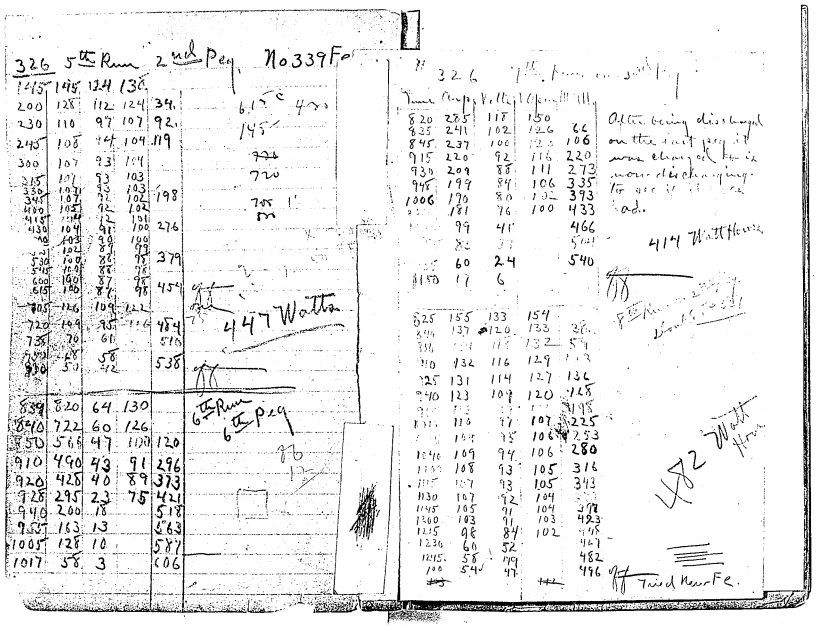
No 326

926	290	114	140		
938	259	105	130		
957	250	100	126		
1006	242	99	123	167	
1022	232	90	117		
1048	200	81	105		
1055	190	77	98		
1110	180	73	94	390	
1125	170	69	92		
11.33	150	60	80		
11.48	95	39	60		
12.03	90	36		509	
1218	68	26			
1247	45	32		541	
1248	16				

3rd Run
No 3787c
3rd Reg

4th Run
Hendale FC 2
3rd Reg

215	295	120	142		
230	246	108	129		
250	253	166	123		
305	249	104	125	358	
320	241	102	123	298	
330	238	100	122		
345	255	104	134		
400	232	98	120		
415	224	94	118	416	
430	131	55	85		
445	120	50			
500	98	40		519	
515	25	8			



326 9 Litre Run 2nd Prep. Unstable Fe 339

Time	Temp	V	I	VOpen	MAH	
800	168	138	156			After the 8th Litre Run this was changed in the wiring diagram from the Line to the Terminal
830	151	120	132	51		
730	134	117	130	74		
840	132	116	125	93		
856	118	103	111	133		
916	113	99	109			
932	112	98	105	198		
958	110	97	107	231		
1010	110	96	107			
1025	103	96	106	275		
1053	103	95	106	346		
1106	99	94	105	370		
1125	104	93	104	403		
1140	102	91	103	429		
1205	62	53		464		
	62	42		500		
	45	35		517		

No. 327 Empty 5.6 103/100 Cc.
Filled 11.55
$7Fe_2O_3$ Reduced in H_2 at 500°
Same as 321 8 Parts
Plumbago 2 "
Moist KOH
Cake 100 Atm. Crush 100 Atm.

No 328 Empty 5.3 102/1000
Full 11.35
Fe same as 321 8 Parts
Plumbago 2 "
Moist KOH
Cake 100 Atm Cup 100 Atm.

Time Amp. Volt. V Open. Max.

328 was coupled with 327 to make a double test Fe.

No. 329 Empty 5.4 99/1000
Filled 11.4

Fe_2O_3 reduced in H + kept in H
for 6 hours. Magnetic 8 parts
P. Limonite 2 "
Moist KOH
Coke 100 Atm Comp. 100 Atm

Time	Amp.	Volts	V Open	Watts	
140	325	123	150		1st Run
150	289	111	130	51	
200	280	107	125	99	
215	270	104	125	167	
230	259	99	118	233	
245	241	93	111	297	
310	243	86	103	393	
325	220	85	101	445	
345	216	83	99	521	
410	204	79	96	608	
425	194	76	94	657	
500	186	411		735	Put in 2 New Michels
513	255	98	120		
515	229	88	106		
530	205	79		797	
540	194	75	92	830	
600	180	69		893	

1st Run
or 3rd Pay
with 2 Michels

329. 2nd Run 3rd Peg. 33

Time	Amp.	Volts	Vopen	Watts
130	243	102	149	
159	229	95	133	
152	215	88	130	
209	211	88	128	142
224	208	87	126	
242	200	84	122	256
255	198	83	119	299
320	187	78	109	379
342	182	76	107	447
356	181	76	105	489
410	179	75	104	531
432	174	73	101	596
450	171	71	100	648
510	169	70	99	676
515	163	69	97	717
538	157	63	93	778
555				

3rd Run 3rd Peg
359 Min Impulse

745	300	125	153	
800	292	139	132	
820	250	105	127	
836	230	100	121	221
853	218	91	110	284
910	212	89	107	345
934	207	87	104	429
948	201	86	103	463
959	199	84	102	496
1010	197	83	100	549
1023	190	79	97	607
1035	183	78	94	638
1115	165	69	86	766
1127	158	66	83	798
1147	143	61	76	823

329. 4th Run Constant Current on Slide resistance.

Time	Amp.	Volts	Vopen	Watts	
855	150	134	147		
907	150	124	136		
915	150	123	134		
930	150	121	132		
950	150	118	130		
1011	150	117	129		
1040	150	113	126		
1100	150	112	124		
1125	150	109	122		
1144	150	105	117		
1149	150	103	116	435	
1247	150	114	133		
111	150	95	109		
127	150	78		545	

5th Run constant current

748	150	137	150		
757	150	123	134		
820	150	118	130		
849	150	115	127		
901	150	111	124		
926	150	100	113		
1010	150	91	102		
1027	150	95	108		
1034	150	91	105		
1057	150	88	102	473	
1117	150	86	100		
1132	150	83	98		
1149	150	80	96	515	
1157	150	78	94	535	
1236	150	110	125		
1258	150	87	102	585	

329

Time	Amp	Volts	Open	Watts
119	150	79	94	642.
138	150	70	87	
157	150	59	77	737.

After fully discharging ~~after~~ ~~to~~ ~~be~~ ~~taken~~ out + laid in air to dry for 3 days,

9.05	150	125	142	
9.14	"	118	128	
9.28	"	112	127	
9.40	"	110	125	
10.00	"	108	123	
10.20	"	105	121	
10.40	"	102	119	
11.00	"	96	115	
11.20	"	43		337.
11.21	"	121	139	
11.41	"	97	112	
12.02	"	93	108	490.
1.05	"	114	130	
1.21	"	99	114	
1.44	"	92	107	537.
2.05	"	89	104	
2.26	"	85	101	642.
2.46	"	77	96	692.
2.58	"	22		720

after discharge to be charged + put in air for 3 days + discharged.

N.G. Ajmer Village 44 was unable to get 150 M.A. out.

No. 330 Empty 5.25 Filled 11.45

Fe_2O_3 reduced in H + kept in H for 6 hours. Non Magnetic

Plumbago 2

Moist NOH

Cake 100 Atm Cup 100 Atm

Time	Amp.	Volts.	Open.	Watts.	
155	315	119	151		1st Run
210	277	105	130		
225	268	103	126	142	2nd Pig
243	251	97	118	220	
256	234	90	109	272	
320	223	85	104	364	
340	212	81	99	436	
358	200	77	96	491	
412	190	73	92	543	
434	173	67	86	610	
450	161	62	80	654	
500	151	58	75	680	
515	137	52	70	716	
537	110	42	55	762	

330. 2nd Run 3rd Pcy. 356 Mi Triplet.

Time	Amp	Volts	Pcy.	Run	Watts
748	315	120	151		
800	273	105	128		
820	257	99	121		
838	237	91	112	221	
854	227	87	106	283	
911	217	83	102	346	
935	202	78	97	430	
945	195	77	94	453	
955	187	72	90	485	
1010	178	69	87	530	
1025	164	63	82	584	
1035	152	59	76	608	
1115	110	42	65	691	
1128	105	40	55	712	
1148	100	38	57	730	

3rd Run
constant Resistant on slide resistance

157	150	136	150		
200	150	126	138		
211	150	122	134		
222	150	120	132		
232	150	119	131		
245	150	117	129		
305	150	116	128		
328	150	114	126		
352	150	111	123		
415	150	108	120		
425	150	104	116		
500	150	96	108		
521	150	94	106		
542	150	92	104		
559	150	89	101		
608	150	88	100	628	

330. 3rd Run Continued.

Time	Amp	Volts	Volume	Watts	
721	150	114	128		ow
729	150	107	118		
757	150	91	104		
810	150	85	100	755	
833	150	76	94	808	
849	150	22		848	

May 3, 1901 gave 330 to Ryan to make some tests.

330 to 325 For Ryan

853	150	116	136		
906	"	110	126		
926	"	107	124		
948	"	108	124		
1000	"	98	115		
1020	"	89	104		
1040	"	86	100		
1100	"	83	101		
1123	"	49			
1143	"	22		425	
1203	70	8			

No 331 Empty 5.9 99/1000
Filled 10.55
Nitrate Ni Mag washed by decant then treated Hyp-NOH & not washed except on filter. Mixed decant but gas from Hyp prevent settling 6
Phenolog 4
100 after

Time	Amp	Volts	VO	pm	MAH	
5.17	280	115	141			1st Run 190 329 Pe.
5.29	248	104	127			
5.44	216	90	111			3rd Pay
5.59	195	80	101			
6.14	182	76	98		210	
6.54	95	40	60			
7.27	72	30				
7.34	56	23			342	
7.44	20	10			348	2nd Run Mixed Fe 340
2.16	248	92	142			3rd Pay
2.31	212	81	126			
2.51	202	78	119			
3.06	196	75	116		175	
3.23	120	45				
3.31	115	45				

No 331 Continued.

346	175	46	126	296	2nd Run 3rd Pay
401	110	42			
416	106	40			
431	95	36			
446	49	15		339	

146	150	115	142		3rd Run 2nd Pay No 340 Fe
201	136	108	132		
231	116	93	113		
246	182	90	168		
301	110	88	106		
316	108	86	105		
331	104	83	104	177	
346	60	48		212	New Fe
356	60	48			
357	82	65			
400	76	60			
416	72	57		269	
431	72	57			
501	67	53			
516	60	48			
531	50	40		316	

N.G. Cracked Swelled & 153.

No 332 Empty 6.15 103/1000
Filled 10.9
Magnesia big bot dried empty put in tube + chlorinated dry, ground + worked in filler 6 Plumbago 4
Moist KOH
Cathode 50 Amm Cup 100 Amm

Time	Amp	Volts	V Cyc	MAH	
518	270	106	130		Last Run 330 Te
530	259	99	124		
545	241	93	117		
600	222	85	107		
615	208	79	100	227	
654	193	74	94		
725	180	69	92		
736	174	67	90	479	
745	156	61			
801	90	34			
815	88	33			
830	86	32		595	
845	70	26			
900	50	18			
915	20	5		638	
9[illegible]	[illegible]				
[illegible]	16				

No 332 2nd Run Double Fe 341

Time	Amp	Volts	V Open	MAH	
217	315	114	149		
232	259	98	121		3rd pop
252	249	94	116		
307	242	92	114	217	
322	238	90	112		
332	232	88	110	396	90
347	265	98	120		20
402	231	87	110	378	
417	219	82	105		
432	128	48	75	479	
447	119	44			
502	114	42			
517	102	38			
532	46	26			98
					3rd Run
147	50	126	142		2nd pop
202	143	114	130		
232	138	110	125		
247	133	105	122		
302	132	106	120		
317	130	104	118	172	
332	128	102	116		
347	124	102	115		
402	122	98	111		
417	120	96	109	327	
434	118	93	107		
503	112	90	102		
518	110	88	100	411	
532	108	86	100		
547	84	67			
602	60	47		1373	98

No 341 Fe

No 332

Time	Mill Amp	Volts	V Open	MAH	
816	300	116	130		
836	252	98	123		
856	240	93	116	174	
916	225	90	110		
936	219	89	105		
956	210	80	102	397	
1016	200	77	98		
1046	168	40			
1106	103	39			
1126	95	36			
1146	41	18			

98

N. G.

Cracked

Cut out

No 333 Empire 0.5 6 2/1000
Tilden 3.1
Silver Oxide 6 —
Plumbago 21 —
Moist KOH 100 Atom.

Time	Amps	Volts	Volume	Amp Hr	
33	150	85	99		1st Run May 23. 1901.
7	"	77	89		
11	"	70	81		
7 29	"	65	65		
9 45	"	58	24		
10 14	"	54	63		
10 34	"	53	63		
11 04	"	50	62		
11 27	"	47	58	435	
11 43	"	45	52		
12 00	"	30		517	70

N. g. Cut Out.

No 334 Empty 0.8 66/1000
Filled 3.2
Silver Oxide 6
Plumbago 4
Moist KOH 100 Atm.

No 335 Empty 2.75 59/1000
Filled 4.3
MnO_2 6
Plumbago 4
Coke 100 Atm. Cup 100 Atm.

No 336 Empty 5.35 105/1000
Filled 10.15

Sulphate Ni precp. by Mag worked by decant only. Chd finished as a mush then worked decant + filter finally distilled H_2O 6 — Plumbago 4 —

Mount ROM
Cake 100 Atm Cup 100 Atm.

Time	Cup.	Volts.	V0	pm	MA	
817	295	111	149			
837	240	91	120			
857	230	88	116		167	
917	223	85	113			
937	212	80	107			
• 957	200	76	102		384	
1017	192	72	97			
1047	149	56	85			
1107	106	39				
1127	73	29			604	
1147	6					

97
86

No 337 Empty 2.7 4F/1000
Filled 4.15
Ferric reduced 500°C.
Part not touched by bromine 8
P limabeans 2
Moist KOH
Cake 10% Acton Cap. 100 Acton.

Time	Amp.	Volts	Quan.	MAH	
2.45	310	118	198		1st Run 3rd Reg.
2.57	2.58	97	117	57	No 358 Nitriplate.
3.24	42	16		117	

H.G. Cut Out.

No 338 Double Iron. 99/1000

From oxide from finely divided iron by CO_2 at white heat slightly magnetic.

6 grams wet.

No 339. Double fe. — 99/1000

Same as 338.

No 340 Double iron.
Fe_2O_3 reduced in H + kept in
H for 6 hours Magnetic
8 – 2

No 341 Double iron
Same as 340.

104
1000

No 342 Empty 6.2
Filled 12.5

Iron by H heated with right amount
70 Plumbago 2
8 Porter

Third Pay Moist 140 H.
Cake 100 Atm Cup 100 Atm

Time	Amps	Volts	K. Open	Watts	
103	280	118	145		1st Run
176	260	103	124	66.5	3rd Pay
185	202	85	103		with 2 Metal Grids
200	191	79	97		
220	101	41		262	
150	308	117	147		
220	220	85	102	132	2nd Run
235	208	79	96	185	3rd Pay with
250	102	37		224	2 metal grids
315	20	6			

Cut 80

MG

No 3.43 Empty 5.5
Filled 10.3
Fe by reduction in H below
500°F 8
Plumbago 2
Moist H OH
Cake 100 Atm Cup 100 Atm

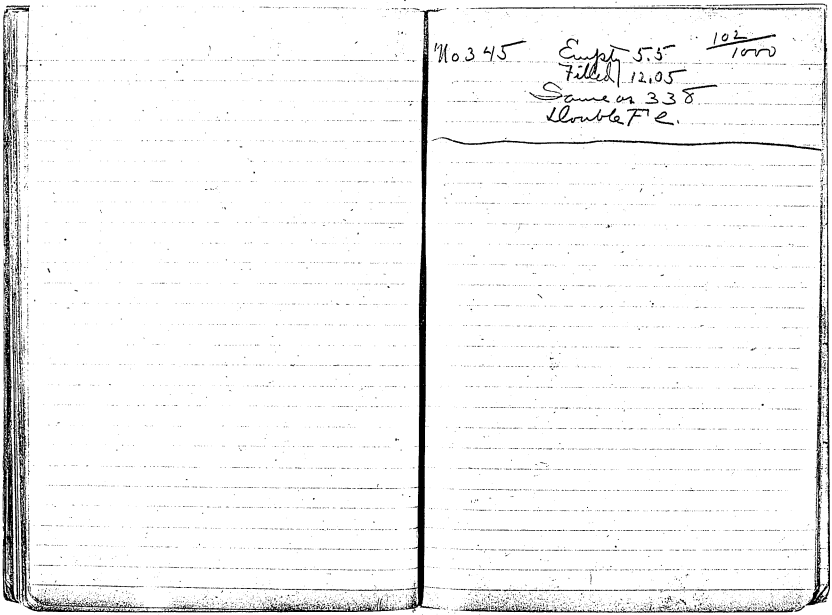
Time	Amp.	Volts	Open H.O.H.		
9:15	274	113	144		1st Run with
9:25	205	87	102		on 3rd Pig under
9:50	133	53	78	118	2 Nickels
9:55	60	26		142	323 + 1336.
9:20	42	18			
9:30	36	14		165	

Humble Fe 91/1000

No 3414 Empty 57
Filled 10.7
Fe_2O_3 by H in Oven at about 700° 3 hours run, 5 hours cooling
Plumbing 02
Moist KOH
This Cake 100 Atm. Comp. 100 Atm

Time	Amps	Volts	Watts	MAH	
9:25	308	116	145		1st Run with on 3rd Pos with 2 Nickel Leads.
9:35	273	103	126		
9:50	259	84	102		
9:55	273	80	100		
9:30	207	79	97	226	
9:30	199	76	94	260	
9:45	170	65	87	306	
10:03	130	50		357	
10:15	106	40		375	
10:40	79	31		413	
11:00	62	23			
					91
9:46	306	116	151		
9:46	269	102	128		
9:32	217	82	103	113	
9:42	211	80	100	148	
9:56	198	75	96		
10:19	178	67	85	252	
10:32	170	57	80	301	
10:47	90	45		331	
11:07	80	30		340	
11:27	60	23			98

My Cutout


M0345
Empty 5.5
Filled 12.05
Same as 338
Double Fire.
10½
1000

H0346 Empty 5.5 115/1000
Filled 11.9
From Fe_2O_3 by Heat 900-800°C
5 hours. Cooling for 9 hours
& Parton
Plumbago 2
Moist KOH
Coke 100 Alum. Cyl 100 Alum.

Time	Amp	Volt.	V Open	MAH	
115	295	124	149		2 J Plate
125	277	116	135		on 3 Ni Pin with
140	269	113	132		2 nickel Pieces
152	264	112	130	149	
220	260	109	128	292	
235	258	108	126	357	
250	253	107	126	421	
315	251	105	125	568	
340	239	100	123	710	
400	144	60		774	
420	139	58		820	
445	130	55		876	
500	116	48		907	
525	60	24			

No. 346 2nd Run 3rd Peg with 2 Nickel grids.

Time.	Amp.	Volts.	V.Open.	MAH
9.00	310	118	155	
9.15	262	102	129	
9.25	258	100	128	115
9.40	249	97	124	178
9.55	237	92	116	
10.13	218	84	104	307
10.36	185	70	96	367
10.46	149	57		409
11.06	120	46		454
11.26	80	31		487
2.26	250	104	147	
2.40	190	79	108	
3.05	69	29		
3.25	40	16		
3.08	160	135	151	
3.29	"	125	137	
3.45	"	113	124	
4.07	"	68		

3rd Run

3rd Peg

Varied Neg. Pl.

4th Run

May 4 1901

N.g. Cut Out.

No. 347 Empty 5.6 Filled 11.1

Copper Hydroxide 6 Parts

Plumbago 4

Moist KOH

Cobra 100 Atm. Cap 100 Atm.

With Zinc negative pole.

103/1000

Time.	Amp.	Volts.	V.Open.	
11.03	90	137	156	1st Run before it was changed.
11.58	55	90		
12.08	53	89		
5.18	56	92		
5.56	113	159	195	2nd Run was changed until it
6.02	102	171	175	gained 7 first Peg
6.10	61	100		24 MAH
6.13	57	86		
6.14	56	92		
6.16	61	100		
6.31	61	104		
6.41	61	104		
6.53	61	104		
7.08	64	104		
				72 MAH.
9.20	65	1035		
9.35	65	103		
10.50	65	1025		122 MAH
11.00	64	106		
11.25	61	103		
11.50	605	103		
12.05	605	102		
12.20	60	102		
12.35	60	101		
12.35	59	98		
12.55	57	94		
1.25	50	84		off 221 MAH.

	Amps	Volts	
730	60	109	
736	46	77	
750	43	73	
805	42	72	
820	48	84	
920	44	78	
940	46	79	
1000	46	79	375 max
1020	47	81	
1047	50	84	412 "
1107	50	84	
1127	49	83	446 "
1147	48	80	
1202	45	78	
1245	42	72	
105	41	70	519 "
120	40	69	
140	40	69	
200	41	69	557 "
220	40	69	
245	40	69	
315	40	69	
330	40	69	
345	40	69	
425	40	69	
PM 6.06	40	69	717 "
PM 10.15	40	69	
AM 8.05	40	68	1110 max.
900	40	67	1150
1000	39	65	1189
1015	39	65	1238
1125	38	64	1283
1200	37	63	1304
100	37	63	1341
240	36	62	1406
400	36	62	
530	36	60	1538
PM 9.00	30	56	1653
9.45	18	29	1971

Cut Out

No 348

106
1000

Peroxide Barium 6
Plumbago 4
Moist 10%
Cake 100 atm Cap 100
Weight 6.12

Time	Amps	Volts	VO	Sec	M.A.H.
846	67	106	145		
849	40	62			
850	36	54			
852	30	44			
855	20	29		5.6	
910	19	28			
918	19	28			
919	18	28			
935	18	27			

88 Mg.

Cut Out

349 Coke 6.85 gm. 105/1000

Iron made the gas flame from soft iron wire. 8 —
Plumbago 2 —
Moist KOH.
Coke 100 Atm. Cups. 100 Atm.

Time	Amp.	Volts	V Open	MAH.	1st Run 3rd Peg.
200	301	116	140		This is probably an
215	242	94	108	68	unfair test as I used
225	223	87	102	103	the nickels on 351 +
235	219	85	100	139	they are practically opposite
245	213	82	97	175	
310	175	70	82	258	
350	60	23		335	off
					2nd Run 3rd Peg
227	318	121	149		
242	257	99	118		
306	222	85	103	147	
326	145	56	65		
347	54	21		265	off Tried new Ni.

N. G.

350.

Wt. 6 grams. 10-4/1000

CuO By roasting carbonate at red heat. 6 ——

Platinum 0.4 ——

Mount KOH.

Cathode 50 Alum. Cup 50 Alum.

Time	Amp.	Volts	Ohms 108	Watts	
10.24	60	10.0			1st Run Fast Pcy.
10.31	43	75		6	
10 40	40	70			
10 50	40	70			
11 14	40	69		35	
11 46	38	66		50	
12 04	38	65		62	
12 56	38	67			
1 33	40	70		86	
2 03	42	72		102	
2 35	43	76		131	
2 50	45	78		140	
3 15	47	80		152	
3 30	47	80			
4 00	47	80			
4 20	47	80			
5 00	47	81			
5 35	47	81			
5 50	47	81		273	
6 15	47	81		283	
9 00	38	65		667	
9 30	37	64		723	
10 00	37	64		779	
10 50	38	66		849	
11 30	40	67		945	

Time	Amp.	Volts	VOpen	MAH	
615	42	76		1053	P.M.
855	27	95		1559	A.M.

Cut Out

351. Wt of Cake 6.9 110/1000

Time 7c by H by giving definite amount of air during 2 days at 260° F 8

Plumbago 2

Moist KOH 100 Ohms.

Time	Amp.	Volts	VOpen	MAH	
100	292	114	140		
112	258	101	118	55	
132	156	60	75	124	
142	51	20		141	
152	23	8			

88 mg cut out

352 Wt of Cube 4. grams $\frac{109}{1000}$.
Iron Oxalate Ferrous .6 —
Plumbago .4 —
Moist KOH. 100 atm.

Swelled & busted grid all to pieces. This is good to test the grid with.

Curt Amt

97/1000

353 Wt of Cake 6.0

Some Iron oxide by heating oxalate till point of decomposition. Cooling + pulverizing H for 6 hours b—
P Pulverizing 0 4—
Moist KOH 100 Atm.
The original cake was 97/1000 + when put in the pocket + pressed it squeezed out part of the iron until it was only 85/1000 so this is not a fair test. How to go be cause the oxide is used up.

Time	Amps.	Volts	VO per	Watts
234	318	118	148	
248	251	95	110	
307	178	67	85	
327	125	46		
348	93	35		

1st Run
3rd "

Tried new Pt

N. G.
Cut Out

354-55-56-57-58-59. Test Nickels. 3 Grids.
Wt of Cake 4.7 grams. 101/100.
5 lb. lot made in kettle using MgOH made in iron tanks. Chlorinated 6 to 8 hours. Then washed by percolation for 4 days till little precip. by Nit Ag. Dried gently. NiO showed shiny flecks on drying. 6——
Plumbing. 4——
Most KOH. 60 Atmospheres

Time	Amp.	Volts	YO Pum	MAH	No 354 single Ni to test.
920	150	132	145		
931	150	121	137		
949	150	116	132		1st Run constant Current.
1012	150	112	128		
1041	150	107	123		
1602	150	95	119		
1123	150	85	108	312	
1141	150	27		338	
256	150	136	149		
318	150	121	136		2nd Run constant Current
327	150	116	134		
343	150	100	115		
355	150	92	108		
415	150	90	107	197.	
450	150	27			

833	150	94	148		
858	140	87	132		
918	160	72	128		
952	150	32	108		
1015	150	16	106	255	

3rd Run
constant current.
but resistance is very high.

4th Run.

115/1000

360. Wt of Cabae 6. grams
Ferrous oxalate from oxalate by heat. Left for 3 hours in CO_2
Plumbago 2
Moist KOH. 60 atmospheres

Pressure Charge at 4.15. Gassing at 4.45

	Amp.	Volts	V Open	MAH	
7 12	300	116	145		1st Pass
7 13	120	45			3rd Pass
7 16	56	26			

N. G.

Cut Out

105/1000

3.61 Ferrous Oxide from oxalate put into 5% soda mixed with graphite (probably two times & ground in cloth & dried in CO_2. Tends to heat by exposing to air. Neither proportions or weight is known exactly. | 60 Atmospheres.

Put on to charge at 4.15, going at 4.45

Time	Amps.	Volts	V Open	M A H.	
7.15	315	116	147		1st Run
7.15	130	60			3 Reg
7.37	55	24			

88 N. G.

Cut Out

3.62 Wt of Coke 5.5 $\frac{10.4}{1000}$
Ferrous oxalate kept in CO_2 2 hours. Put into beaker of gasoline. Gasoline evaporated to thick slurry 8 grams wax mixed with 1.5 grams of graphite to allother for part of gasoline. 60 Amperes

Put to charge at 4.50 gaining at 5.20

Time	Amps	Volts	V.O	Remarks
7.26	282	113	1.45	1st Run
7.37	96	39		3rd Pay
7.43				

N.G.

Cut Out

101/1000

3[illegible]3

Mfg Cake 4.7

Single nickel for testing. Same as nickels 354 – 359. 6 —

Pennsboro 9.4 —

Mint NOH Go Atlanta

Time	Amps	Volts	Vopen	Watt	
701	285	121	155		1st Run
816	253	106	130		3rd Pay
838	235	90	113	157	
901	189	73	104	203	
921	189	45		253	
931	98	37		270	Rivid Near F.e.
857	318	120	157		
818	298	105	132		2nd Run
821	222	84	107		3rd Pay
[illegible]	213	80	104	195	339 double F.e.
855	200	76	102	250	
912	98	37	[illegible]	292	
936	96	36		331	
[illegible]	87	32		347	

Put with another grid of the same.

364 Wt of Coke 6. grams. 103/1000

Fe by reduction in H of Fe_2O_3 from oxalate. 1 Hour at about 650° F.

Plumbago 2 —
Moist KOH. 75 Atm.

Time	Amp	Volts	Volume	mA H
117	150	137	152	
129	150	120	131	
152	150	115	129	
219	150	117	128	
255	150	117	127	
306	150	115	126	
326	150	114	125	322.
342	150	114	125	
375	150	114	125	
416	150	113	124	447
434	150	112	124	492
472	150	112	124	
523	150	112	124	615
577	150	111	123	655
631	150	110	122	705
654	150	108	120	757
737	150	106	119	795
750	150	101	116	835
				off
728	150	112	130	
733	"	103	118	(over)
740	"	94	112	860
743	"	75		872 drops all off suddenly

354

1st Run Continued

Time	Amps	Volts	V Open	Watts	
747	150	118	135		Put in New Mi.
750	"	106	122		
805	"	99	115		
831	"	90	106		
850	"	83	100	1030	
903	"	44	55		off
					2nd Run
135	150	133	149		
153	"	120	132		
218	"	117	129		
235	"	115	127		
301	"	103	114		
326	"	100	111		
344	"	100	110		
407	"	96	108		
434	"	91	102		
453	"	87	99	495	
515	"	37		550	off Tried New Mi

May 3 1911 3rd Run

803	150	130	145		
805	"	122	134		
822	"	119	132		
840	"	117	129		
858	"	114	127		
915	"	106	118		
935	"	99	111		
955	"	97	109		
1015	"	94	105	330	
1030	"	91	102	368	off

354

3rd Run continued

Time	Amps	Volts	V Open	Watts	
1031	150	112	121		New Mi
1041	"	100	110	393	
1056	"	94	104	455	
1116	"	54	65	505	off

N. G. cut out

365 Wt of Cake 2.15 $\frac{75}{1000}$

Ferrous Sulphate in boiling KOH. ppt. precipitate, filtered, washed. 6

Plumbago 4

Mont KOH. 75 atmos.

time	Charge V	Volts	Opens V	Opens ″/₁₀ H	
29	150	122	143		

1st Run constant current slide resistance

Off

N.g Can't keep up the current drops very quickly

grid burnt d.

N

cut out

366 Mfg Cine 1.85 60/1000

Fe from amalgam. 6
Phenolphthalein 4
Moist KOH 75 Vitreous.

Time	Amps.	Volts	Open	MAH	1st Run constant current.
150	150	128	149		
214	150	117	134		
231	150	108	124		
246	150	95	130	155	
311	150	51		182	
316	150	34		195	
214	150	120	150		2nd Run constant current
236	"	86	112		
300	"	25	55	110	

" "

N. G.
Cut Out.

Cupric hydroxide treated in Hypochlorite Soda— then washed dried & put in grid 6 to 4 wt 7.2 for both | This had been Charged for 2 hours on Current of 8 Amp the Copper Zinc Neg used 20% KOH, 1st pag—

Time	Amps.	Volts.	Volts	Watts	By not listening to what was said up 2nd page 8 P.M. = 1st pag.
5.35	200	175	190		
5.38	95	170	175		
543	90	158	163		
550	64	112			
555	45	80			
600	47	83			
605	56	98		32	
724	58	100	114		
740	58	100	108		
758	58	100	108		
823	55	98	107		
852	52	94	106		
945	44	79			
1127	42	75		142	
1230	40	72		185	on all night
123	40	69		420	
600	40	69		565	
100	39	67			
248	38	65		750	
4—	38	68			
612	38	67			
710	38	68	87	1374	on all night
945	37	66		1431	opened Circuit for 10 minutes Volts went to .87—

Time	Amp	Volts	MAH	
1200	36	63	1513	
320	34	59	1629	
640	30	52	1736	Was left open for 45 min + voltage went up to 88 open.
735	45	80		
739	30	53		

Was all down in the morning.

Cut Out

368 6 g. 104/1070

Fe_2O_3 from oxalate reduced by H at 700 – 800°F for 1¾ hrs.

Plumbago 2

Moist KOH 75 Amps.

Time	Amp.	Volts	VO	Amp	MAH	
151	150	129	147			1 of Fine
215	150	118	135			constant current
232	150	116	133			on Slide Rheostat.
300	150	114	130			
317	150	114	130			
325	150	113	130			
352	150	112	129			
410	150	111	129			
425	150	111	129			
	150	110	128			
502	150	109	127		480	
524	150	108	127			
546	150	107	127		565	
609	150	107	126		623	
620	150	105	125		673	
647	150	110	134			
708	150	104	125		735	
728	150	101	124		775	
748	150	97	120		825	
808	150	43			875	

368

2nd Run Constant Current.

Time	Amp.	Volts	V Open	Watts	
858	150	125	145		
926	150	91	106		
942	150	90	105		
1008	150	89	103		
1020	150	86	100	205	
1023	150	102	118		new Mi.
1035	150	95	110	235	
1047	150	92	107	265	
1058	150	90	106	292	
1110	150	88	104	322	
1125	150	87	104	359	
1146	150	84	102	411	
1158	150	84	101	441	
1235	150	116	131		
1257	150	104	118	496	
118	150	91	106	548	
137	150	85	101		
158	150	81	98	648	
218	150	78	96		
246	150	75	93	753	
308	150	64	82	823	

3rd Run Constant Current

Time	Amp.	Volts	V Open	Watts	
924	150	138	152		
954	150	117	133		
1016	"	115	130		
1032	"	110	126		
1049	"	108	122		
1124	"	93	107		
1143	"	92	105		
12.00	"	91	104		
106	"	117	131		
130	"	97	109		
158	"	90	103		
219	"	87	101		
237	"	84	99		
259	"	80	96	673	
325	"	75	92		
343	"	73	88		
408	"	68	85	845	
411	150	96	110		new Mi
433	"	85	82		
452	"	78	65	948	
904	150	138	150		
915	"	125	136		
934	"	121	133		
954	"	118	131		
1017	"	114	126		
1034	"	112	125		
1054	"	102	117	425	
1114	"	94	107	475	
1134	"	92	105	525	
103	"	115	129		
116	"	97	109		
128	"	92	105		

368 4th Run continued.

Time	Amps	Volts	V Open	MAH	
1:45	150	89	103		
2:05	"	88	100	680	
2:25	"	85	99	730	
2:45	"	82	95	780	
3:00	"	79	92	817	
3:15	"	74	90	855	
3:31	"	69	85	895	
3:43	"	62	80	907	
3:44	"	88	110		Plus Mi
3:56	"	65	92	965	
4:10	"	45		1000	

Taken to make cc double

369 Wt of Coke 2.85 25/1000

Ni in HgOx Plaque 4 6

Mount ROH 75 Amps.

Time	Amps	Volts	V Open	MAH	
7:16	150	130	150		1st Run constant Current
7:22	150	73	92		Very poor drop rapidly
7:37	150	71	89		
7:53	150	65	87		
8:20	150	58	84	160	
8:42	125	13			
9:-	150	132	153		2nd Run
9:15	150	93	126		constant Current
9:53	150	67	97		
10:15	150	55	80		
10:40	"	43	65	235	

2.85/7 | 490 (17 285 285 285

310 Wt of Cake 6. 105/1000

Reg. # 1 Iron 8
Pb 2
Moist NOH 75 Atm.

10 g Fe_2O_3 from oxalate reduced in H for 1¼ hours at 700–800 hours.

Time	Amps.	Volts	Vapen	Math.	
409	150	137	152		1st Run.
430	"	123	137		
458	"	119	132		
515	"	117	131		
530	"	116	130		May 3 1901
548	"	114	128		
612	"	113	128	292.	off
645	"	115	135		on
700	"	111	127		
715	"	104	121		
730	"	85	102		
745	"	83	100	442.	
800	"	80	97		
815	"	76	96		
826	"	71	91		
845	"	65	86	425	
910	"	98		655	off
1141	150	125	150		2nd Run
203	"	113	135		
220	"	109	132		
235	"	108	130		May 4 1901
253	"	106	128		
305	"	104	127		
325	"	103	127		
345	"	101	125		
405	"	99	120		

370

Trains	Amp.	Volts	Vapor	Math	
424	150	79	109	407	
427	150	112	123		JR Newth
454	"	93	106		
509	"	90	109	512	
526	"	87	102		114/1000
550	"	80	96	614	
603	"	75	92	647	
616	"	73	90	679	

JR
Cut Out

3

101/1000

371 Mg Coke 5.2

Refn. #3 Iron 8
Plumbago 2
Moist KOH 75 Atm.

Fe_2O_3 in H for 1 hour at 650-750° Black

Time	Amp	Volts	V Open	Watt	
932	150	138	151		1st Run. 101/1000
6'8	"	84	107		
7'08	"	79	103		May 4 1901
7'36	"	28	94		
9'54	"	14		205	
					2nd Run
151	150	138	152		May 5 1901 Sunday
159	"	119	131		
2'05	"	100	111		
2'17	"	92	107		
2'53	"	76	89	155	
3'13	"	52			
3'10	"	22		197	

M. G.

Fe_2O_3 from oxalate. H in excess for 8½ hours. 109/1000

372 Wt of Cake 4.2

Refit #4 Iron — 8 / 2

Plumbago

Mount NOH. 175 Atm

Time	Amps.	V—	V open	MAH	
8.22	150	111	143		1st Run 102/1000
8.41	"	103	128		May 4 1901
8.59	"	86	111		
9.16	"	57		135	
					2nd Run May 8. 1901 Sat
7.52	150	134	150		
7.43	"	120	132		
7.59	"	117	129		
8.18	"	92	108	115	
8.38	"	38			

N.g.

Cut Out.

373 Wtg Cake 4.9

110/1000

atta. X/A Nickel 6
Plumbago 4
Mount KOH. 75 atm.
1st 13 W. Lot.

Time	Amp	V-	Open	Matt	
112	150	135	150		1st Run
127	"	119	131		
1[illegible]7	"	115	127		
264		112	124		
226	"	109	123		May 3 1901
278	"	104	117		
315	"	94	108	307	
332	"	84	105	350	
350	"	33	55	395	
					2nd Run
415	150	136	152		
427	"	120	134		
325	"	116	129		
1017	"	114	127		May 4 1901
1035	"	112	124		
1058	"	107	124		
1117	"	105	123		127/1000
1137	"	107	122	315	
1153	"	100	117	380	
1158	"	45		400	
					Double

374 Mt of Cobre 41.7

104/1000

Alta #2A Nickel 1 at 13 Wt. Lot. 6 —
Plumbago 4 —
Mount Roth. 75th Adm.

Time	Amp.	Volts	Vapor	Mark	
8.35	150	136	153		1st Run
1.46	"	121	134		
2.02	"	119	132		
2.28	"	115	129		
2.46	"	117	126		May 3 1901
3.15	"	96	109		
3.40	"	94	108	312	
3.58	"	93	107	337	
4.17	"	33		405	
9.04	150	136	150		2nd Run
9.29	"	120	132		
9.52	"	116	129		
10.11	"	110	123		May 4 1901
10.35	"	96	108		
11.00	"	95	105		
11.20	"	88	104		
12.26	"	39	45	340	125/1000

Cut Out.

375 Mtg Cube 6. 103/1000

Rofn. ⅔ Fe. P—
Plumb. 2—
Moist NOH. 75 Atm.
Fe_2O_3 in H for 1½ hours at 600-700° + for 15 hours after cooled down

Time	Amp.	Volts	Volts	MAH	
7.37	.150	137	151		1st Plum.
7.47	"	126	140		
8.01	"	123	136		
8.16	"	122	134		May 3 + 4 1901
8.38	"	120	133		
8.52	"	119	132		
9.21	"	118	131		
9.35	"	117	130		
9.50	"	116	129		
10.04	"	115	128		
10.21	"	114	127		
10.33	"	113	126		
10.48	"	112	126		
11.20	"	111	125		
11.40	"	109	124	607.	
12.03	"	107	123	665	
12.21	"	103	118		
12.32	"	98	118	737.	
12.47	"	88	110	775	
12.54	"	83	103	802.	
1.06	"	78	100	807.	
					Plum Ni
1.01	"	115	130		
1.05	"	102	116		
1.15	"	99	112	842.	
1.35	"	98	111	892.	
1.56	"	96	110	938	
2.00	"	95	109		
2.20	"	95	108	1005	
2.35	"	94	107		
2.50	"	93	106	1080	
3.10	"	92	105	1130	
3.25	"	91	104		over.

375

1st Run continued

Time	Amp.	Volts	VO	Watts
344	150	90	104	1215
400	"	88	103	1255
755	"	116	131	
805	"	109	123	1280
825	"	103	117	1330
847	"	93	107	1385
909	"	85	101	1440
924	"	81	97	1477
940	"	77	93	1517
1000	"	69	86	1567
1015	"	55	78	
1634	"	23		1652
807	150	138	152	
820	"	124	137	
835	"	122	134	
853	"	120	133	
916	"	119	132	
940	"	118	131	
958	"	116	130	
1025	"	110	125	
1044	"	109	124	
1109	"	101	115	
1120	"	95	109	
1120	"	95	108	1492
1127	"	115	126	
1141	"	101	114	
1152	"	99	112	
1158	"	98	110	575
100	"	122	135	
120	"	104	116	
135	"	98	110	
155	"	94	106	
220	"	91	104	775
235	"	89	102	
258	"	87	100	872
325	"	82	96	

115/1000

2nd Run May 9. 1901

375

2nd Run Continued

Time	Amp.	Volts	VO	Watts
344	150	77	92	
358	"	70	87	1020
800	"	124	114	
819	"	77	92	1067
839	"	56	74	1187
946	"	30		1135
755	150	140	153	
809	"	124	137	
825	"	122	134	
835	"	121	133	
919	"	119	131	
944	"	117	129	
952	"	115	128	
951	"	113	126	
1000	"	111	125	
1031	"	107	122	
1051	"	100	115	
1111	"	93	108	
1132	"	89	104	
1148	"	34		577
1205	"	125	138	
111	"	108	120	
124	"	99	111	
143	"	94	107	
208	"	91	104	
227	"	89	103	797
247	"	86	100	
314	"	80	95	915
335	"	75	90	
347	"	59		
403	"	51		1045

2nd Run May 9 1901

Taken two Make a double

376

107/1000

With catch no 5 Fe Plumes 6 — 4 —

Moist KOH 75-Ats.

Time	Comp	Volts	V0/sec	Matt.	
1109	150	94	112	-	1st Runs
1117	"	87	106		May 4 1901.
1129	"	79	98		
1146	"	57		133	112/1000
1156	"	57	-		
120	150	136	157		2nd Runs
1245	"	51			May 5. 1901 Sat.
1245	"	37			

Cut Out.

377 Mag Carbon 6 —
Rafn Ox 5 Fe 8 —
Moist 1 Ox. 75 Alumn. graphite 2 —

97/1000

Time	Comp.	Vertr.	Vo Ferry	Wt H.	
113	150	122	145		1st Run May 4 1901
133	"	101	116		N.G.
139	"	88	104		101/1000
143	75	8			
123	150	133	150		2nd Run May 5 1901
1103	"	89	102		
165	"	19			N.G.

328 Nt y Cubo 4.7 — 103/1000
Ni ✕ Dil 3 W. Lot. 6
Graph 4
Moist NOH 75 atm.

Time	Pump	Volts	Vo	per Watt.		
110	150	136	167			1st Run
122	"	121	134			
135	"	117	129			
206	"	115	127			
236	"	111	123			
243	"	97	109			
308	"	96	109			
329	"	91	101			
355	"	89	105	407.		142/1000
414	"	33		460		
	150	131	148			
823	"	117	132			2nd Run
838	"	114	129			May 9 1901
853	"	112	127			
911	"	109	124			
933	"	107	122			
952	"	103	119			
1007	"	100	117			
1031	"	95	113			
1051	"	88	106	390		135/1000
1103	"	80		420		
214	"	140	152			3rd Run May 14 1901
232	"	118	131			
250	"	115	127			
314	"	112	124			
326	"	111	123			
353	"	108	121			Taken by mechanical triplet
413	"	105	119			
434	"	102	113			
457	"	92	108	407		
544	"	46		475		

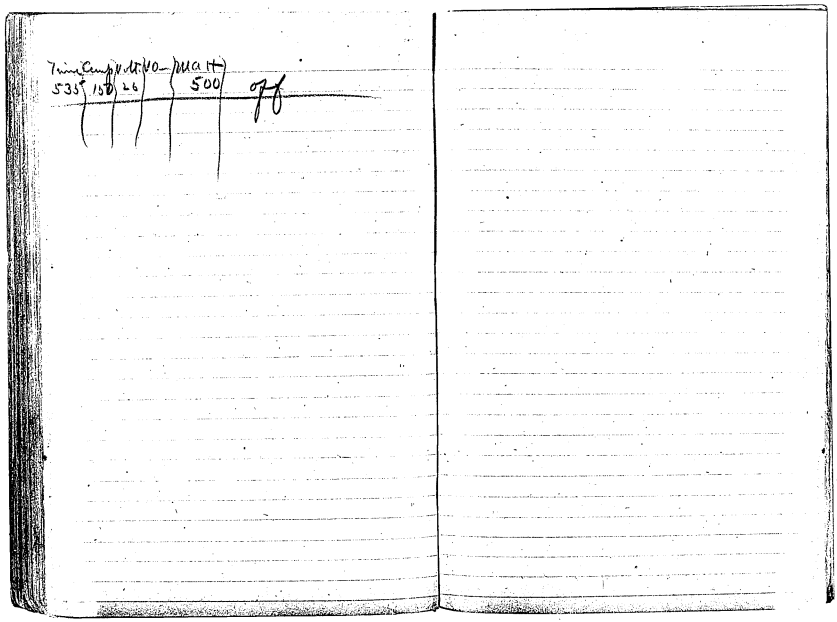
379 Culture No. 7

Mi #1/2 1st 13 Hr. 9 T. 8

9 crops 2

NOX. 75 atm.

Time	Amp.	Volts	NO	Mean	Mall.	
9:15	150	134	147		1st Run	May 7. 1901
9:32	"	114	130			
9:54	"	115	128			
10:17	"	113	126			
9:40	"	111	124			
9:56	"	109	122			
10:15	"	98	112			
10:44	"	91	106			
11:5	"	89	105	425		139
11:15	"	38		450	off	1000
9:16	150	131	146			
9:32	"	123	135		2nd Run	
9:54	"	118	131			May 9 1901
10:17	"	116	129			
9:40	"	113	127			
9:56	"	110	124			
10:15	"	97	109			
10:44	"	91	106			
11:5	"	89	104			
11:15	"	87	103			132
11:15	"	81	102	435		100
11:15	"	40		452	off	
2:15	150	137	150		3rd Run	
2:33	"	128	131			May 14 1901
2:55	"	114	127			
3:16	"	112	124			
2:40	"	110	123			7 atm to make a triplet
2:58	"	108	121			
3:15	"	106	119			
3:33	"	102	116			
3:55	"	93	108			
5	"	75		472		



380

Cake 4.7

Ni #2 1st 3 Wr. Cot. 6

grey. 4

Moist H_2O. 75 Alum.

109/1000

Time	Amp.	Volts	Y Open	Mah.	
113	150	135	152		1st Run
123	"	120	153		
1206	"	115	128		
207	"	113	127		
238	"	111	125		
248	"	107	121		
308	"	94	109		
330	"	90	107		
359	"	79	103	402	
400	"	34	64	417	

153/1000

1172	150	138	153		2nd Run
1211	"	125	138		May 9 1901
1233	"	118	132		
1248	"	115	128		
1300	"	113	126		
1318	"	110	124		
1340	"	107	121		
1613	"	103	118		
1632	"	95	112		
1652	"	88	106	375	
1712	"	75	104	425	
1776	"	35		435	

147/1000

2[illegible]	150	135	152		3rd Run May 19. 1901
2[illegible]	"	118	132		
2[illegible]	"	113	128		
317	"	106	121		
327	"	92	107		
3[illegible]	"	92	107		
4[illegible]	"	89	105		Taken to Machine a triplet
4[illegible]	"	84	103	400	
4[illegible]	"	43		460	46

381 Cake 4.6

Ni ✱ 3 1st 13 Hr Bake

Mount Nitk

95/1000

Graph 4

75 Calm.

Time	Amp.	Volts	Vo	Amp	Watts	
118	150	139	154			1st Run
124	"	123	136			
147	"	115	125			
203	"	113	126			
229	"	112	124			
259	"	110	123			
309	"	107	122			
331	"	105	119			
345	"	40			375	ff
407	"	55	132			New Ni.
424	"	42			382	ff

115/1000

8	150	139	152			2nd Run
9	"	128	140			
9	"	120	133			May 9 1901
9	"	117	130			
9	"	115	128			
9	"	112	126			
10	"	110	125			113/1000
10	"	107	123			
10	"	99	120	352		
10	"	25		415	ff	

Double.

105/1000

382 Culture 4.7

Ni * 3½ 1st 13th botten. c —

oxycephalus. 4 —

Moist NH_4OH 15% 75 Atm.

Time	Amp.	Yolk	Vol	Germ	Mark	
8:56	150	135	149		1st Run	May 7 1901.
8:58	"	116	129			
8:55	"	114	127			
9:17	"	112	126			
9:41	"	110	124			
9:59	"	107	122			
10:23	"	91	108	320		
10:44	"	40		370		150/1000
1:03	150	135	150		2nd Run	May 9 1901
1:10	"	123	136			
1:27	"	117	130			
1:42	"	113	127			
2:05	"	108	122			
2:25	"	91	107			
2:49	"	90	106			150/1000
3:12	"	93	110	322		
3:33	"	29		375		

Cut Out.

List to Run.

Fe.	Ni
321'	323
322	324
329	325
330"	326
337'	336'
346"	363"
349'	
353	

342
343
344
346
Best Fe ~~329~~